EFH ASSESSMENT TEMPLATE

This template is intended to aid Federal agencies in the preparation of EFH assessments.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance Essential Fish Habitat (EFH) for those species regulated under a Federal fisheries management plan. The MSA requires Federal agencies to consult with NMFS on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (MSA §305(b)(2)).

EFH means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity (MSA §3). For the purpose of interpreting this definition of EFH: Waters include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrate includes sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle (50 CFR 600.10). Adverse effect means any impact which reduces quality and/or quantity of EFH, and may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey or reduction in species fecundity), sitespecific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810).

The length of the EFH Assessment can vary depending on the magnitude of the potential impacts to EFH, but all EFH Assessments must include the following information: (1) a description of the proposed action; (2) an analysis of the effects, including cumulative effects, of the proposed action on EFH, the managed species, and associated species, such as major prey species, including affected life history stages; (3) the Federal agency's views regarding the effects of the action on EFH; and (4) proposed mitigation, if applicable (50 CFR 600.920(g)(2)).

The EFH mandate applies to all species managed under a federal Fishery Management Plan (FMP). For the Pacific West Coast (excluding Alaska), there are three FMPs, covering groundfish, coastal pelagic species, and Pacific salmon. Therefore, Federal agencies must consider the impact of a proposed action on EFH for any species

¹ EFH designations and associated requirements for Federal agencies to consult with NMFS on actions that "may adversely affect" EFH are in effect once the Secretary of Commerce approves the Federal fishery management plans (FMPs). The Secretary approved the EFH provisions of the Groundfish FMP on March 3, 1999, the Coastal Pelagics FMP on June 8, 1999, and the Pacific coast Salmon FMP on September 27, 2000.

managed under those three FMPs. A brief description of EFH identified in each FMP follows. Detailed descriptions are contained in the references following the EFH Assessment template.

Groundfish: EFH for Pacific coast groundfish is defined as the aquatic habitat necessary to allow for groundfish production to support long-term sustainable fisheries for groundfish and for groundfish contributions to a healthy ecosystem. Descriptions of groundfish EFH for each of the 83 species and their life stages result in more than 400 EFH identifications. When these EFHs are taken together, the groundfish EFH includes all waters from the mean higher high water line, and the upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon and California seaward to the boundary of the U.S. EEZ.

Coastal pelagic species: Amendment 8 to The Coastal Pelagic Species Fishery Management Plan describes the habitat requirements of five pelagic species: Northern anchovy, Pacific sardine, Pacific (chub) mackerel, jack mackerel and market squid. These four finfish and market squid are treated as a single species complex because of similarities in their life histories and habitat requirements. EFH for coastal pelagic species is defined as: The east-west geographic boundary of EFH for CPS is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon and Washington offshore to the limits of the EEZ and above the thermocline where sea surface temperatures range between 10° – 26° C. The southern boundary is the U.S.-Mexico maritime boundary. The northern boundary is more dynamic, and is defined as the position of the 10° C isotherm, which varies seasonally and annually.

Pacific salmon - chinook, coho, and Puget Sound pink salmon: EFH for the Pacific coast salmon fishery means those waters and substrate necessary for salmon production needed to support a long-term sustainable salmon fishery and salmon contributions to a healthy ecosystem. To achieve that level of production, EFH includes all those streams, lakes, ponds, wetlands, and other currently viable water bodies and most of the habitat historically accessible to salmon in Washington, Oregon, Idaho, and California. In the estuarine and marine areas, salmon EFH extends from the nearshore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone (370.4 km) offshore of Washington, Oregon, and California north of Point Conception. Freshwater EFH for Pacific salmon includes all those streams, lakes, ponds, wetlands, and other water bodies currently, or historically accessible to salmon in Washington, Oregon, Idaho, and California, except areas upstream of certain impassable man-made barriers (as identified by the PFMC), and longstanding, naturally-impassable barriers (i.e., natural waterfalls in existence for several hundred years).

This template is intended only as a guide to preparing an EFH assessment, and can be modified as appropriate. The text in red is taken from an example and must be modified to fit the proposed action. The text in **bold blue** is explanatory, and should be removed

from the final product. NMFS national guidelines for integrating ESA and EFH consultations and additional guidance on level of effect determinations is located at:

http://www.nwr.noaa.gov/1habcon/habweb/msa.htm

The information prepared by the Federal action agency for an informal or formal consultation under the Endangered Species Act (ESA) (50 CFR 402.14) may also serve as the EFH assessment if it includes all the components required in an EFH assessment (50 CFR 600.920(g)), so that no separate analysis is necessary. In situations where there is partial overlap between EFH of MSA-managed species and ESA-listed species/critical habitat, information prepared by the Federal action agency for the ESA consultation can serve as the EFH assessment for the species that are both managed and listed, but a separate EFH assessment is necessary to evaluate potential adverse effects on EFH for any non-listed species if the action may adversely affect the EFH for those species. For non-listed species, the Federal action agency should provide the EFH assessment information to NMFS along with its biological assessment (BA) or analysis of effects to listed species and critical habitat, either as a discrete clearly labeled section of the same document, or as a separate EFH assessment, to facilitate combined EFH and ESA review.

The Pacific Fisheries Management Council has issued descriptions of EFH for the species regulated under three Federal fisheries management plans: groundfish, coastal pelagic species, and Pacific salmon.

ESSENTIAL FISH HABITAT ASSESSMENT FOR COASTAL DREDGING PROJECTS

Action Agency

US Army Corps of Engineers, Portland District

Project Name

The Maintenance Dredging Program for the Oregon Coastal Projects

Essential Fish Habitat Background

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires Federal agencies to consult with NMFS on activities that may adversely affect Essential Fish Habitat (EFH).

The objective of this EFH assessment is to describe potential adverse effects to designated EFH for federally-managed fisheries species within the proposed action area. It also describes conservation measures proposed to avoid, minimize, or otherwise offset potential adverse effects to designated EFH resulting from the proposed action.

Description of the Project/Proposed Activity

Describe the project or reference description in previous sections of the BA. If previous section referenced, provide a brief description (1 or 2 lines) of the project. The species and life-history stages affected are noted here. They can be listed in table form (see Table 1) and referenced.

The Groundfish FMP groups the various EFH descriptions into seven units called "composite" EFHs. This approach focuses on ecological relationships among species and between the species and their habitat, reflecting an ecosystem approach in defining EFH. Seven major habitat types are proposed as the basis for such assemblages or "composites". These major habitat types are readily recognizable by those who potentially may be required to consult about impacts to EFH, and their distributions are relatively stationary and measurable over time and space. The list of groundfish species with EFH should be based on the EFH composite within the action area. An action area may contain more than one composite (e.g., rocky shelf and non-rocky shelf), and the species list should include all groundfish species contained in all of the composites.

The seven "composite" EFH identifications are as follows.

1. Estuarine - Those waters, substrates and associated biological communities within bays and estuaries of the EEZ, from mean higher high water level

(MHHW, which is the high tide line) or extent of upriver saltwater intrusion to the respective outer boundaries for each bay or estuary as defined in 33 CFR 80.1 (Coast Guard lines of demarcation).

- 2. Rocky Shelf Those waters, substrates, and associated biological communities living on or within ten meters (5.5 fathoms) overlying rocky areas, including reefs, pinnacles, boulders and cobble, along the continental shelf, excluding canyons, from the high tide line MHHW to the shelf break (~200 meters or 109 fathoms).
- 3. Nonrocky Shelf Those waters, substrates, and associated biological communities living on or within ten meters (5.5 fathoms) overlying the substrates of the continental shelf, excluding the rocky shelf and canyon composites, from the high tide line MHHW to the shelf break (~200 meters or 109 fathoms).
- 4. Canyon Those waters, substrates, and associated biological communities living within submarine canyons, including the walls, beds, seafloor, and any outcrops or landslide morphology, such as slump scarps and debris fields.
- 5. Continental Slope/Basin Those waters, substrates, and biological communities living on or within 20 meters (11 fathoms) overlying the substrates of the continental slope and basin below the shelf break (~200 meters or 109 fathoms) and extending to the westward boundary of the EEZ.
- 6. Neritic Zone Those waters and biological communities living in the water column more than ten meters (5.5 fathoms) above the continental shelf.
- 7. Oceanic Zone Those waters and biological communities living in the water column more than 20 meters (11 fathoms) above the continental slope and abyssal plain, extending to the westward boundary of the EEZ.

Potential Adverse Effects of Proposed Project

The actual EFH discussed will depend on the project location and the species present. The adverse effects discussed in the BA/BE can be referenced, and additional effects discussed here. Unless it is clear that the effects to an individual species are unique, it is not necessary to discuss the adverse effects on a species-by-species basis, as this would certainly be repetitive, and would provide no additional information. Instead, discuss the project's effects on EFH, generally. However, you should discuss the effects to salmonid, groundfish and coastal pelagic EFH separately.

Adverse Effects to Salmon EFH

Describe effects to salmonid EFH

Adverse Effects to Ground Fish EFH

Describe effects to groundfish EFH

Adverse Effects to Coastal Pelagics EFH

Describe effects to coastal pelagic EFH

EFH Conservation Measures

Describe the conservation measures that have been incorporated into the project that will minimize the potential adverse effects to EFH. If they have already been described, refer to that description. An example is:

The following measures will be implemented to minimize the potential adverse effects to designated EFH described above.

- 1. Conservation measure 1
- 2. Conservation measure 2
- 3. etc.

Conclusion

Summarize the potential effect that the project will have on EFH. This takes into account the conservation measures proposed as part of the project that were described above.

References

These are the references that provide the descriptions and definitions of EFH, and were produced by NMFS and the Pacific Fisheries Management Council. The actual references you may reference will depend on what species (groundfish, coastal pelagics, salmon) are in the action area. They are provided here for convenience.

Casillas, E., L. Crockett, Y. deReynier, J. Glock, M. Helvey, B. Meyer, C. Schmitt, M. Yoklavich, A. Bailey, B. Chao, B. Johnson and T. Pepperell. 1998. Essential Fish Habitat West Coast Groundfish Appendix, National Marine Fisheries Service, 778 pp.

PFMC (Pacific Fishery Management Council). 1999. Amendment 14 to the Pacific Coast Salmon Plan. Appendix A: Description and Identification of Essential Fish Habitat, Adverse Impacts and Recommended Conservation Measures for Salmon (August 1999).

PFMC (Pacific Fishery Management Council). 1998. Final Environmental Assessment/Regulatory Review for Amendment 11 to the Pacific Coast Groundfish Fishery Management Plan (October 1998).

PFMC (Pacific Fishery Management Council). 1998. The Coastal Pelagic Species Fishery Management Plan: Amendment 8 (December 1998).

TABLE 1: EXAMPLE ONLY!

This table is one of a series of EFH Fish Species Templates for the Pacific Fishery located at:

http://www.nwr.noaa.gov/1habcon/habweb/msa.htm

Select the appropriate table for your consultation.

Table 1. Species of fishes, and life-stages with designated EFH in the action area. (EXAMPLE ONLY)

Species	Eggs	Larvae	Young Juvenile	Juvenile	Adult	Spawning
Groundfish						
Spiny Dogfish			X	X	X	
Ratfish				Х	X	
Lingcod		X		Х	X	X
Cabezon		Х				
Kelp Greenling		Х				
Pacific Cod		Χ	X	X	X	X
Pacific Whiting (Hake)			Х	Х	X	
Sablefish		Χ	Х	X	X	X
Darkblotched Rockfish				Х	X	
Greenstriped Rockfish				Х	X	
Thornyheads		X				
Pacific Ocean Perch		1		X	X	
Widow Rockfish			X	X		
Misc. Rockfish				Х	X	
Arrowtooth Flounder				X	Х	
Butter Sole	X	X	_			
Curlfin Sole	X					
Dover Sole	X			X	X	
English Sole	X	Х	Х	X	X	X
Flathead Sole		Х		X	X	X
Pacific Sanddab				X	X	
Petrale Sole			X	X	X	<u>l</u>
Rex Sole	X	X		X	X	
Sand Sole	X	X				
Starry Flounder	X	X	X			X
Coastal Pelagic Species						
Northern Anchovy	X	Х		X	X	
Pacific Sardine	×	X		X	X	
Pacific Mackerel	X	X		Х	X	
Jack Mackerel					X	
Market Squid	?	?	?		X	?
Pacific Salmon						
Coho Salmon				X	X	
Chinook Salmon		<u> </u>	X	X	X	